

**MARYLAND HISTORICAL TRUST  
DETERMINATION OF ELIGIBILITY FORM**

NR Eligible: yes ☐  
no ☒

Property Name: SHA Bridge No.2300604 US 50 WB over Herring Creek Inventory Number: WO-482

Address: Ocean Gateway (US 50 WB) Historic district: ☐ yes ☒ no

City: Ocean City Zip Code: 21842 County: Worcester

USGS Quadrangle(s): Ocean City

Property Owner: State Highway Administration Tax Account ID Number: \_\_\_\_\_

Tax Map Parcel Number(s): \_\_\_\_\_ Tax Map Number: \_\_\_\_\_

Project: Reevaluation of Highway Bridges Statewide Agency: FHWA/MD SHA

Agency Prepared By: KCI Technologies, Inc.

Preparer's Name: Alison Ross Date Prepared: 10/16/2009

Documentation is presented in: Project Review and Compliance Files

Preparer's Eligibility Recommendation: ☒ Eligibility recommended ☐ Eligibility not recommended

Criteria: ☒ A ☐ B ☒ C ☐ D Considerations: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

*Complete if the property is a contributing or non-contributing resource to a NR district/property*

Name of the District/Property: \_\_\_\_\_

Inventory Number: \_\_\_\_\_ Eligible: ☐ yes ☐ no Listed: ☐ yes ☐ no

Site visit by MHT Staff ☐ yes ☒ no Name: \_\_\_\_\_ Date: \_\_\_\_\_

Description of Property and Justification: *(Please attach map and photo)*

SHA Bridge No. 2300604 (MIHP No. WO-482) is a triple-span concrete girder bridge that carries US 50 WB over Herring Run in the vicinity of Ocean City in eastern Worcester County, Maryland. Constructed in 1942, it is part of a dualized highway that connects Maryland's eastern shore and resort towns with the principal cities on the Chesapeake Bay and the interior and also may have served as access for military traffic during World War II. The bridge's 2006 Average Daily Traffic (ADT) count is 13,225, and the 2026 future ADT count is 15,248. The road's function class is Urban Other Principal Arterial.

**Background**

The first evaluation of SHA Bridge No. 2300604 was completed in January 1993, at which time it was determined to be NRHP-eligible under Criterion A for its significance in transportation as a product of large-scale building efforts of the 1920s-1940s that resulted from increased automobile use and travel, and under Criterion C for its design. In 1995, a Maryland Inventory of Historic Properties (MIHP) form was completed. The Interagency Historic Highway Bridge Inventory Committee (HHBIC) considered the MIHP form in 1996 and subsequently determined Bridge No. 2300604 to be eligible for the National Register of Historic Places (NRHP) under Criteria A and C. The Maryland Historical Trust (MHT) concurred with the determination in 2001.

**MARYLAND HISTORICAL TRUST REVIEW**

Eligibility recommended ☐ Eligibility not recommended ☐

Criteria: ☐ A ☐ B ☐ C ☐ D Considerations: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

MHT Comments: *Information purposes only - Bridge remains NR-eligible*

Jim Tanenbaum ✓  
Reviewer, Office of Preservation Services

5/14/2010  
Date

\_\_\_\_\_  
Reviewer, National Register Program

\_\_\_\_\_  
Date

SHA Bridge No. 2300604 was re-evaluated for NRHP eligibility as part of the 2009 statewide re-evaluation of the eligible bridges in SHA's Historic Highway Bridge Inventory. SHA requested that KCI conduct research to gather information and provide additional analysis of each of the bridge's integrity and significance to supplement the original NRHP evaluation. As part of the re-evaluation, a KCI historian conducted research at SHA's Office of Structures (OOS) to gather additional information on the bridge, including alterations and repairs that have been made to the structure between the years of 1995 to 1998. The following document were reviewed by the KCI architectural historian: inspection files, repair history files, bridge plans, the Bridge Inspection and Remedial Engineering (BIRE) Worklist, and the Structure Inventory and Appraisal (SI&A) reports. A KCI architectural historian visited the bridge to examine and document current conditions with field notes, digital photography, and black and white photography. In order to re-evaluate the bridge's historic significance and NRHP eligibility, the following documents were used: the original MIHP form, Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report and A Context for Common Historic Bridge Types, NCHRP Project 25-25, Task 15.

#### Evaluation and Justification

The bridge has a high Bridge Sufficiency Rating (BSR) at 84.8. The inspection reports and SI&A Ratings were not available for the years 1995 through 1997. Between the years of 1998 and 2004, the deck and superstructure received ratings of 6, and the substructure received a rating of 7. In 2005, the rating for the substructure decreased to a 6. In 2006, the deck and the superstructure received ratings of 5, while the substructure rating remained a 6.

Field survey in 2009 showed that there is cracking on the deck. Observations also were made of the decorative railing. The concrete endposts and all of the original railing elements and sections on the westbound bridge are original, unlike the railing on the eastbound bridge, which has had one of the sections replaced. There are areas of heavy rust and missing material on the railing on the northern side of the westbound bridge as well as some holes on the horizontal rails at the vertical post connections. In addition, there is rust falling from the bottom of the horizontal rails.

Field survey also has revealed that protective jackets were placed on the piers for scour protection (perhaps in 1993 at the same time that they were placed on the eastbound bridge). The bent caps also were repaired due to deterioration, as evidenced on the 1986 as-built drawings.

Bridge No. 2300604 retains a high degree of integrity of setting, location, association, and feeling. It also has retained its integrity of design, materials, and workmanship, especially of the dualized design of the bridge and the unusual attention-to-detail found in the Art Deco-style chevron-patterned railing. Although the railing's material exhibits some areas of rust and section loss, this re-evaluation has found that the railing still retains its integrity of design, material and workmanship. Despite the areas of deterioration mentioned above, this evaluation agrees with the previous two evaluations and recommends that this bridge remains eligible for listing in the NRHP under Criterion A for its role as a product of large-scale road building efforts as a result of the increased automobile use and travel, especially to resort areas such as Ocean City, and under Criterion C as a dualized highway that has served as the main access to Ocean City since the bridge's construction in the early 1940s. The bridge also is significant under Criterion C for its design, especially that of the Art-Deco-style railing, which matches the railing on the eastbound bridge and exhibits an unusual attention to detail.

Additional research indicates that the bridge is not associated with any known person of local, regional, or national significance (Criterion B). Criterion D was not evaluated as part of the historic standing structures studies for this project.

#### MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended \_\_\_\_\_ Eligibility not recommended \_\_\_\_\_

Criteria: \_\_\_ A \_\_\_ B \_\_\_ C \_\_\_ D Considerations: \_\_\_ A \_\_\_ B \_\_\_ C \_\_\_ D \_\_\_ E \_\_\_ F \_\_\_ G

MHT Comments:

\_\_\_\_\_  
Reviewer, Office of Preservation Services

\_\_\_\_\_  
Date

\_\_\_\_\_  
Reviewer, National Register Program

\_\_\_\_\_  
Date

MIHP No. WO-482  
SHA Bridge No. 2300604  
U.S. 50 WB over Herring Creek  
Worcester County, Maryland

### Photograph Log

Image File Name	Description of View
WO-482_2009-01-13_01.tif	Southern elevation, facing northeast
WO-482_2009-01-13_02.tif	Northern elevation, facing southeast
WO-482_2009-01-13_03.tif	Close-up of southwestern endpost and railing, facing northeast
WO-482_2009-01-13_04.tif	Close-up of northern elevation, showing fascia and railing, facing south
WO-482_2009-01-13_05.tif	Close-up of railing, showing rust and section loss
WO-482_2009-01-13_06.tif	Close-up of substructure, facing southeast

Printed on Epson Premium Photo Paper Glossy with Epson UltraChrome Black Ink

Saved on Verbatim UltraLife Archival Grade DVD-R, AZO recording dye



MIHP WO-482

SHA Bridge No 2300604, U.S. 50 WB  
Over Herring Creek  
Worcester Co. MD

James Skoak

Jan. 13, 2009

MD SHPO

S. Elev. facing NE

# 1 of 6



MIHP WO-482

SHA Bridge No. 2300604, U.S. 50, WB  
over Herring Creek

Worcester Co., MD

James Skocek

Jan. 13, 2009

MD SHPD

N. elev., facing SE

#2 of 6





MTHP WO-482

SHA Bridge No 2300604, U.S. 50 WB  
over Herring Creek

Worcester Co., MD

James Skocik

Jan. 13, 2009

MD SHPD

Close up of SW end post and railing  
facing N/E

# 3 of 6



MIHP WD-482

SHA Bridge No. 2300404 U.S. 50WB  
over Herring Crk.

Worcester Co., MD

James Skocik

Jan. 13, 2009

MD SHPO

Close-up of N elevation, showing fascia  
& railing, facing S  
#4 of 6



MIHP WO-482

SHA BRIDGE No. 2300604, U.S. 50  
WB, over Herring Crk.

Worcester Co., MD

James Skoak

Jan. 13, 2009

MD SHPO

Close-up of railing, showing rust +  
section loss.

#5 of 6



MIHP WO-482  
SHA Bridge No. 230dc04, 41S, 50  
WB, over Herring Crk.

Worcester Co., MD  
James Skoak  
Jan. 13, 2009

MD SHPO

Close-up of substructure, facing  
SE

#6 of 6

Maryland Historical Trust

Maryland Inventory of Historic Properties number:

NO-482

Name:

#23006/US 50 WB OVER HERRING CRK

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended ☒ X

Eligibility Not Recommended

Criteria: ☐ A ☐ B ☐ C ☐ D Considerations: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ None

Comments:

Reviewer, OPS: Anne E. Bruder

Date: 3 April 2001

Reviewer, NR Program: Peter E. Kurtze

Date: 3 April 2001



MARYLAND INVENTORY OF HISTORIC PROPERTIES  
HISTORIC BRIDGE INVENTORY  
MARYLAND STATE HIGHWAY ADMINISTRATION  
MARYLAND HISTORICAL TRUST

MHT NO. WO-482

NAME AND SHA NO.: 23006

LOCATION

Road Name and Number: US 50 WB over Herring Creek

City/Town: Ocean City X vicinity

County: Worcester

Ownership: X State    County    Municipal    Other

Bridge projects over:    Road    Railway X Water    Land

Is bridge located within designated district?:    yes X no

   NR listed district    NR determined eligible district

   locally designated    other

Name of District   

BRIDGE TYPE

   Timber Bridge

   Beam Bridge    Truss-Covered    Trestle    Timber-and-Concrete

   Stone Arch Bridge

   Metal Truss Bridge

   Moveable Bridge

   Swing    Bascule Single Leaf    Bascule Multiple Leaf

   Vertical Lift    Retractable    Pontoon

   Metal Girder

   Rolled Girder    Rolled Girder Concrete Encased

   Plate Girder    Plate Girder Concrete Encased

   Metal Suspension

   Metal Arch

   Metal Cantilever

X Concrete

   Concrete Arch    Concrete Slab X Concrete Beam    Rigid Frame

   Other    Type Name

## DESCRIPTION

### **Describe the Setting:**

Bridge 23006 carries US 50 WB over Herring Run in the vicinity of Ocean City in eastern Worcester County. US 50 runs in an east-west direction at this location; Herring Run flows south-north. The area west of the bridge is relatively undeveloped, however, several residential and commercial buildings stand near the eastern end of the bridge. Worcester County lies within the Tidewater physiographic province which contains mostly flat land crossed by tidal rivers and streams. A similar structure which carries the eastbound lanes of US 13 is located directly south of this bridge.

### **Describe the Superstructure and Substructure: (Discuss points identified in Context Addendum, Section C)**

Bridge 23006, a triple-span concrete girder bridge, has a total bridge length of 84'. Each span measures 28' in length. The asphalt covered 32' wide roadway with a 4' sidewalk carries the two westbound lanes of US 13. The chevron patterned metal railings between concrete posts closely match those of the eastbound bridge.

The abutments and piers consist of concrete caps supported on pre-cast concrete piles. At the abutments, the pile bents incorporate timber bulkheads at the bottom of the slope protection. The concrete wing walls and sloped abutments appear to be united with the sloped concrete retaining walls which run along the north and south banks of the creek under both the westbound and eastbound bridges.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Nine percent (10) of that total were triple-span bridges; 37 bridges (33%) were multiple span.

### **Discuss major alterations:**

As-built drawings dated April 1986 show plans for emergency substructure repairs to alleviate severe concrete deterioration of bent caps under the exterior concrete girders of the bridge at the southeast end of pier 2 and the northwest end of pier 1. These repairs also entailed fixing deteriorated timber members which retain the slope fill, and placing protective jackets around piles.

## HISTORY

**When Built:** 1942

**Why Built:** Local transportation needs

**MARYLAND INVENTORY OF HISTORIC PROPERTIES  
HISTORIC BRIDGE INVENTORY  
MARYLAND STATE HIGHWAY ADMINISTRATION  
MARYLAND HISTORICAL TRUST**

**MHT NO. WO-482**

**Who Built:** State Roads Commission of Maryland

**Who Designed:** Unknown

**Why Altered:** Repairs to alleviate deterioration of structure.

**Was this bridge built as part of an organized bridge building campaign?:** Yes

During the 1940s, the State Roads Commission began concentrating on providing dual lane divided highways, similar to US 40 which provided a straight, wide highway able to accommodate the increased vehicular traffic of the era. US 50, a major east-west route that connected Maryland's eastern shore and resort towns such as Ocean City with the principal cities on the Chesapeake Bay and the interior, may also have served as access for military traffic during World War II.

**SURVEYOR ANALYSIS**

**This bridge may have NR significance for association with:**

☒ A (Events)   ☐ B (Person)   ☒ C (Engineering/Architectural Character)

**Was this bridge constructed in response to significant events in Maryland or local history?**

Ocean City developed as a major resort town through regular train service during the turn of the century. The introduction of the automobile led to even greater growth of the area during the first half of the twentieth century. Access to the eastern shore was also required by military traffic during the war, thus major east-west and north-south routes were widened and rehabilitated to accommodate the heavy trucks.

**When the bridge was built, and/or given a major alteration, did it have a significant impact on the growth and development of the area?**

Yes. The reconstruction and dualization of US 50 during the 1940s had a significant impact on the growth and development of eastern shore communities and resorts.

**Is the bridge located in an area which may be eligible for historic designation, and would the bridge add or detract from the historic and visual character of the possible district?**

Bridge 23006 is not located in an area potentially eligible as a historic district. However, according to the files at the Maryland Historical Trust, this bridge was determined eligible for listing in the National Register under Criteria A & C in January 1993. The statement of significance for this resource noted that the bridge is "significant for transportation as a product of the large-scale road building efforts of the 1920s, 1930s, and 1940s that came about as a result of the great growth in

MARYLAND INVENTORY OF HISTORIC PROPERTIES  
HISTORIC BRIDGE INVENTORY  
MARYLAND STATE HIGHWAY ADMINISTRATION  
MARYLAND HISTORICAL TRUST

MHT NO. WO-482

automobile use and travel. In addition, Bridge No. 23006 is significant for its design. The bridge railing with its Art Deco flavor exhibits an unusual attention to design."

**Is the bridge a significant example of its type?**

Yes, this bridge is a significant example of its type. The influence of the Art Deco architectural movement of the 1940s is evident in its decorative parapet. The bridge also represents an early indication of the planning of dualized highways and the construction of twin bridges to carry separate lanes of traffic.

**Does the bridge retain integrity of the important elements described in the Context Addendum?**

Yes, this bridge retains integrity of its character defining elements. Although recent reports indicate that the structure exhibits minor signs of age and wear, including cracking and spalling of the parapets, abutments, and wing walls, none of these character defining elements has been replaced or removed.

**Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer, and why?**

Yes, this bridge is a significant example of bridge design in conjunction with the development of dual-lane divided highways.

**Should this bridge be given further study before significance analysis is made, and why?**

No, this bridge should not receive any further study.

**BIBLIOGRAPHY**

Crosby, Walter Wilson

1906      *First Report on State Highway Construction (May 1905-January 1906)*. The Johns Hopkins Press, Baltimore.

1908      *Second Report on State Highway Construction (January 1906-January 1908)*. The Johns Hopkins Press, Baltimore.

MARYLAND INVENTORY OF HISTORIC PROPERTIES  
HISTORIC BRIDGE INVENTORY  
MARYLAND STATE HIGHWAY ADMINISTRATION  
MARYLAND HISTORICAL TRUST

MHT NO. WO-482

LeViness, Charles T.

1958      *A History of Road Building in Maryland.* State Roads Commission of Maryland, Baltimore.

Maryland Historical Trust.

Information on file at the Maryland Historical Trust, Crownsville.

Maryland State Highway Administration

1986      As-built drawings. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

1987-93      Bridge inspection reports. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

P.A.C. Spero and Company and Louis Berger and Associates, Inc.

1994      *Historic Bridges in Maryland: Historic Context Report.* Prepared for Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore.

State Roads Commission of Maryland

1930      *Reports of the State Roads Commission of Maryland for the Years 1927, 1928, 1929, and 1930.* State of Maryland, State Roads Commission, Baltimore.

1941      As-built drawings. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

1941      Contract files. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

SURVEYOR INFORMATION

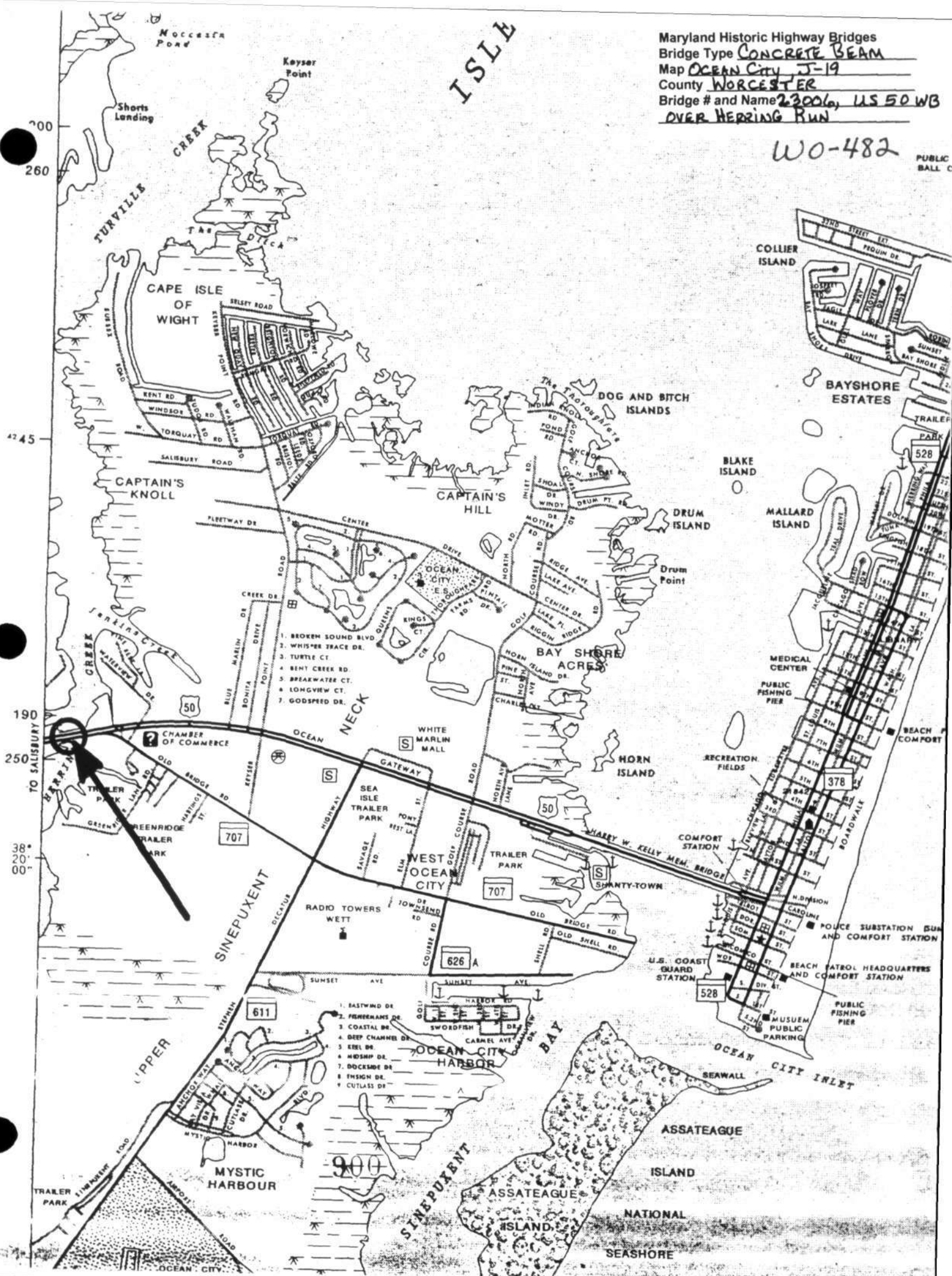
Name:	<u>Margaret A. Bishop and Michelle M. Lupien</u>	Date: <u>13 May 1996</u>
Organization:	<u>KCI Technologies, Inc.</u>	Telephone: <u>(717) 691-1340</u>
Address:	<u>5001 Louise Dr., Suite 201</u> <u>Mechanicsburg, PA 17055</u>	



Maryland Historic Highway Bridges  
Bridge Type CONCRETE BEAM  
Map OCEAN CITY J-19  
County WORCESTER  
Bridge # and Name 23006, US 50 WB  
OVER HERRING RUN

WO-482

PUBLIC  
BALL C





WO-482

WORCESTER COUNTY

MATT HICKSON

2-2-95

~~MARYLAND SHPO~~

BRIDGE 23000, LOOKING WEST ON US 50

1 OF 5





W0-482

WORCESTER COUNTY

MATT HICKSON

2-2-95

~~MARYLAND SHPD~~ SHA

BRIDGE 23006, LOOKING EAST ON US 50

2 OF 5



W0-482

WORCESTER COUNTY

MATT HICKSON

2-2-95

MARYLAND SHPO

BRIDGE 23006, LOOKING UPSTREAM (SE) / WB BRIDGE

3 OF 5



W0-482

WORCESTER COUNTY

MATT HICKSON

2-2-95

~~MARLAND SHED~~ SHA

BRIDGE 23006, LOOKING DOWNSTREAM (NW) / WB BRIDGE

4 OF 5



W0-482

WORCESTER COUNTY

MATT HICKSON

2-2-95

~~MARYLAND SHPD~~

BRIDGE 2300G, LOOKING DOWNSTREAM (NW) / EB BRIDGE

5 OF 5



9203725

INDIVIDUAL PROPERTY/DISTRICT  
 MARYLAND HISTORICAL TRUST  
 INTERNAL NR-ELIGIBILITY REVIEW FORM

Property/District Name: Bridge #23006 Survey Number: WO-482

Project: US 50 over Herring Creek,  
MD-12 over Pokomoke River, Worcester County Agency: SHA

Site visit by MHT Staff: X no     yes Name                      Date           

Eligibility recommended   X   Eligibility not recommended       

Criteria:   X   A     B   X   C     D Considerations:     A     B     C     D     E     F     G     None

Justification for decision: (Use continuation sheet if necessary and attach map)

Bridge No. 23006 is eligible under Criteria A and C. It is significant for transportation as a product of the large-scale road building efforts of the 1920s, 1930s, and 1940s that came about as a result of the great growth in automobile use and travel. In addition, Bridge No. 23006 is significant for its design. The bridge railing with its Art Deco flavor exhibits an unusual attention to design.

Documentation on the property/district is presented in: Project File

Prepared by: Rita Suffness

Elizabeth Hannold January 29, 1993  
 Reviewer, Office of Preservation Services Date

NR program concurrence:   X   yes     no     not applicable

E. Anderson 2-2-93  
 Reviewer, NR program Date

*gms*

Survey No. W0-

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

☒ Eastern Shore (all Eastern Shore counties, and Cecil)  
☐ Western Shore (Anne Arundel, Calvert, Charles,  
Prince George's and St. Mary's)  
☐ Piedmont (Baltimore City, Baltimore, Carroll,  
Frederick, Harford, Howard, Montgomery)  
☐ Western Maryland (Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

☐ Paleo-Indian 10000-7500 B.C.  
☐ Early Archaic 7500-6000 B.C.  
☐ Middle Archaic 6000-4000 B.C.  
☐ Late Archaic 4000-2000 B.C.  
☐ Early Woodland 2000-500 B.C.  
☐ Middle Woodland 500 B.C. - A.D. 900  
☐ Late Woodland/Archaic A.D. 900-1600  
☐ Contact and Settlement A.D. 1570-1750  
☐ Rural Agrarian Intensification A.D. 1680-1815  
☐ Agricultural-Industrial Transition A.D. 1815-1870  
☐ Industrial/Urban Dominance A.D. 1870-1930  
☒ Modern Period A.D. 1930-Present  
☐ Unknown Period ( ☐ prehistoric ☐ historic)

III. Prehistoric Period Themes:

☐ Subsistence  
☐ Settlement  
☐ Political  
☐ Demographic  
☐ Religion  
☐ Technology  
☐ Environmental Adaption

IV. Historic Period Themes:

☐ Agriculture  
☒ Architecture, Landscape Architecture,  
and Community Planning  
☐ Economic (Commercial and Industrial)  
☐ Government/Law  
☐ Military  
☐ Religion  
☐ Social/Educational/Cultural  
☒ Transportation

V. Resource Type:

Category: Structure

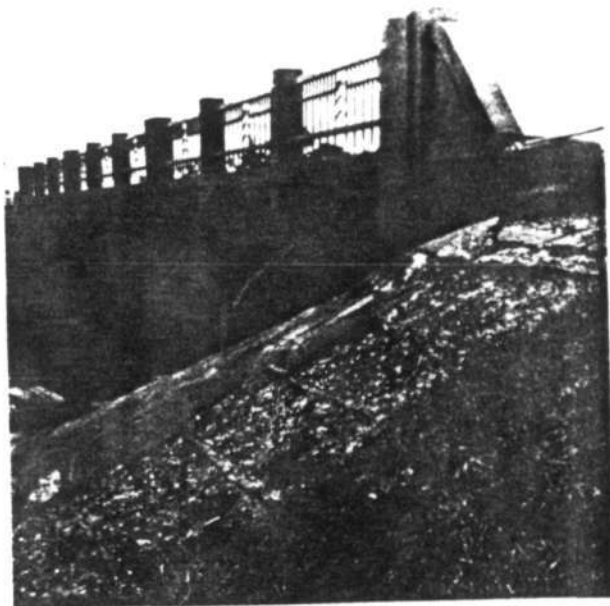
Historic Environment: Village

Historic Function(s) and Use(s): Transportation

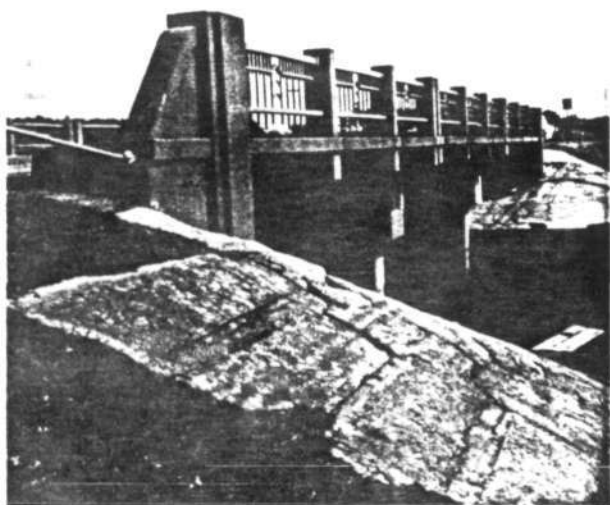
Known Design Source: Unknown



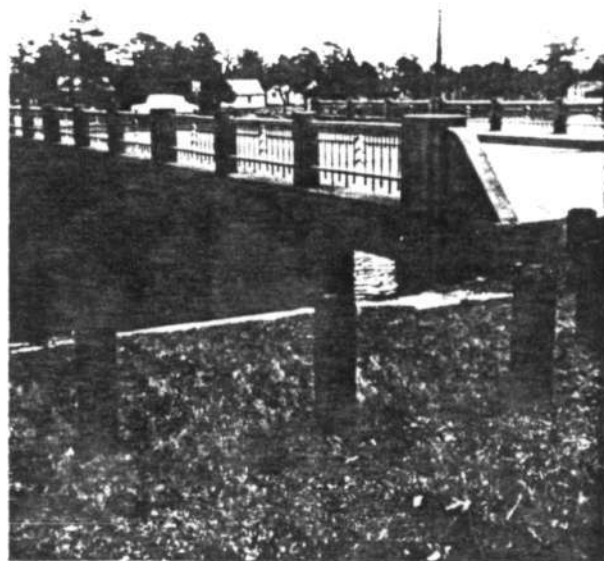
Upstream side W.B.L. Bridge



Downstream side W.B.L. Bridge



Upstream side E.B.L. Bridge



Downstream side E.B.L. Bridge

B#2300C

WO-482  
 5860 NE  
 ASSAWOMAN BAY

**BERLIN QUADRANGLE**  
**MARYLAND - WORCESTER CO.**  
**7.5 MINUTE SERIES (TOPOGRAPHIC)**

1 330 000 FEET

75°07'30"

38°22'30"



1 E 4 E

21931

WO-482

US 50 over Herring  
 Creek - Bridge  
 23006  
 Worcester County